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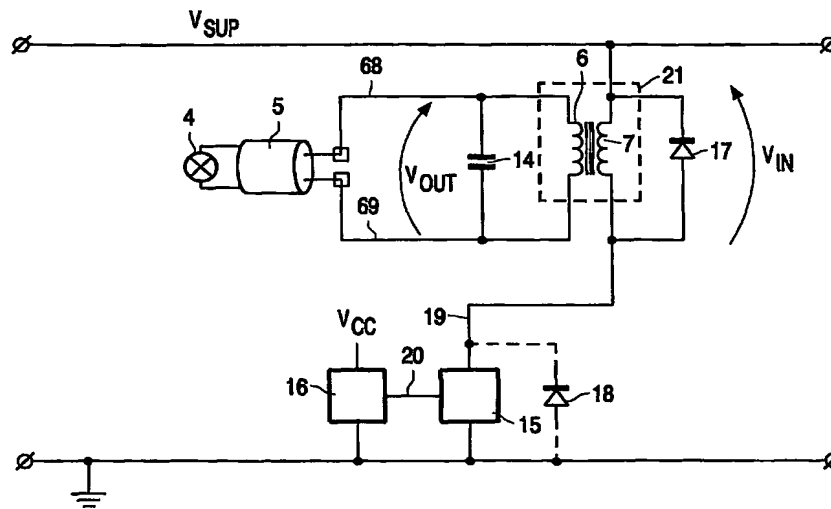
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(54) Title: CIRCUIT AND METHOD FOR PROVIDING POWER TO A LOAD, ESPECIALLY A HIGH-INTENSITY DISCHARGE LAMP



(57) Abstract: Circuit for providing power to a load with a pre-determined specification, comprising: - a transformer having a primary winding and a secondary winding, said secondary winding being part of a resonant circuit; - first and second load connection nodes for coupling of the load in series to the secondary winding; - a switch coupled in series to the primary winding, an on and off-time of the switch being controllable by a control element, for generating a voltage pulse over the primary winding; wherein a diode is coupled in parallel to the primary winding for demagnetizing the transformer during the off-time of the switch, the on and off-time of the switch being predetermined. The diode provides a free-running path to demagnetize the transformer if the switch is off. To prevent saturation of the core of the transformer, a subsequent voltage pulse is only applied to the circuit if the free-running current through the diode has become substantially zero.

WO 2004/064455 A1